### **SITREP.08.03**

SITUATION REPORT ON EMERGENCY TRANSBOUNDARY OUTBREAK PESTS (ETOPS) FOR AUGUST WITH A FORECAST TILL MID-OCTOBER, 2003

#### **SUMMARY**

1. **Summary:** This report provides an update on the situation of emergency transboundary outbreak pests (ETOPs) in Africa, the Middle-East, Central and Southwest Asia, and Latin America in August with a forecast till mid-October 2003. Key ETOPs, including locusts, grasshoppers, armyworm and grain-eating *Quelea* birds are covered by the report. A brief overview of the current status of each of these pests is outlined in the remainder of this summary and detailed accounts with a sixweek forecast are provided thereafter.

### DESERT LOCUST, SCHISTOCERCA GREGARIA (FORSKAL)

2. . Scattered adult desert locusts, Schistocerca gregaria (Forskal) were seen in August in the western and northwestern outbreak region. Small-scale breeding was reported in southern Mauritania, northern Mali and Northern Niger. Limited-scale breeding might have also occurred in northeastern Chad and southern Algeria where favorable conditions persisted. Other countries in the region remained fairly calm during the month. Locust populations will slightly increase in areas where favorable conditions persisted and adult locusts were seen, but other areas in the region will remain fairly calm during the forecast period. Considering the vastness and remoteness of the breeding and outbreak areas,

- it is important that regular surveys and monitoring are carried out to mitigate any unpredicted locust upsurges.
- 3. Small-scale breeding occurred in Northern Darfur, Sudan where favorable conditions persisted throughout August. A mixture of scattered desert locusts and the African migratory locusts were reported in agricultural areas in southern Egypt. The rest of the countries in the summer breeding areas in the region remained fairly calm. Locust numbers could slightly increase during the forecast period in a few localities including the flooded areas in Kassla and the summer breeding areas in Sudan where favorable conditions persisted over the past two months. Significant locust activities are not expected during the forecast period.
- 4. A few isolated adult locusts persisted in the summer breeding areas in the eastern outbreak region in Pakistan. It is likely that small-scale breeding has begun in both India and Pakistan as a result of the good rains that fell in July and August. A slight increase in locust numbers could occur during the forecast period, but significant activities are not expected.

## OTHER LOCUSTS AND GRASSHOPPERS.

5. Red locusts, *Nomadacris septemfasciata* (Surville): No update was received on red locusts at the time this report was compiled. It is likely that control operations that were planned in July in Iku-Katavi and Wembere outbreak areas, Tanzania have reduced locust numbers. Low precipitation and a lack of locust activities might have also contributed to the low locust numbers in the other outbreak areas in the region. There is a low probability that small-scale breeding could occur during

the forecast period should the rains fall in the outbreak areas. Routine survey and monitoring are recommended to avoid any unpredicted invasions.

- 6. Madagascar migratory locust, Locusta migratoria capito (L.). No reports were received on the Madagascar migratory locust or red locust in August. It is likely that ecological conditions may slightly improve and small-scale locust activities could begin appearing with the onset of the rains in the outbreak areas during the forecast period.
- 7. Populations of the Senegalese grasshopper, Oedaleus senegalensis (Krauss) (OES) were seen in a number of areas in southern Senegal in late July into August. Control operations using a biopesticide, Green Muscle, were being considered at the time this report was compiled. Adult Zonocerus variegatus (L), variegated grasshoppers, were seen copulating. Egg laying is in progress in parts of Casamance and Tambakunda areas, Senegal. Most of the grasshopper outbreaks that were reported in the western lowlands of Eritrea in July were controlled, but details were not available on the species and extent of infestation at the time this report was compiled. No reports were received on the tree locust, Anacridium melanorhodon (Walker), or brown locust, Locustana pardalina (Walker).
- 8. The locust outbreak in Afghanistan was on a lower scale this year compared to last year. Only 120,000 ha were reported infested in Baghlan, Samangan, Balkh and Kunduz. This was partly attributed to better planning and early intervention as well as better coordination of external assistance. No reports were received on the Italian locust *Calliptamus italicus* (L), Moroccan locust, *Dociostaurus maroccanus*

or migratory locust in Uzbekistan and Kazakhstan in August. It is likely that locust numbers may generally decline in the invasion areas and limited locust activities will be seen during the forecast period.

- 9. Armyworm, Spodoptera exempta (Walker). Most of the armyworm infestations that were reported from the highland and western lowland areas of Eritrea were reported controlled by the end of July and further infestations were not sighted in August. Armyworm infestations were also controlled on sorghum fields in Dire Dawa Administrative region, Ethiopia. No armyworm infestations were reported in August from the other DLCO-EA or IRLCO-CSA member countries. Significant armyworm activities are not expected during the forecast period.
- 10. Red-billed quelea, Quelea quelea (L.). Ouelea birds continued being a problem in August in Tanzania, Kenya and Ethiopia where they were seen attacking cereal crops. Control operations were carried out using DLCO-EA spray aircraft in Oromiya region, Ethiopia and Moshi region, Tanzania. A private aircraft was hired by the farmers to spray the birds in Meru District, Kenya. No reports were received from the other DLCO-EA or IRLCO-CSA member-countries. It is likely that quelea birds will continue posing a threat to crops in a few outbreak areas hence, survey and monitoring are essential to avert any serious bird damage during the forecast period. End of Summary.

# ENVIRONMENTAL SITUATION: WEATHER AND ECOLOGICAL CONDITIONS

11. Due to the Inter-Tropical Convergence Zone (ITCZ) frequenting around 20N in

northern Mauritania, northern Mali and southern Algeria, fairly good rains fell in the western region desert locust outbreak areas from Mauritania all the way to Chad. Heavy rains were also recorded in Morocco, Algeria and Senegal where heavy floods were reported. It is likely that ecological conditions will continue improving in these areas during the forecast period.

- 12. Good rains fell in the central region areas for two consecutive months. Heavy rains were reported in Sudan, Eritrea and Ethiopia in July and August. The interior of Yemen, northern Djibouti and northern Somalia also recorded good rains. As a result of the rains, conditions have continued improving in most of the Central Region summer breeding areas.
- 13. Monsoon rains continued falling in August in the summer breeding areas along the Indo-Pakistan border. Jodpur and Barmer, in Rajasthan, India, recorded 76 mm and 31 mm, respectively. Parts of Tharparkar and Cholistan deserts, Pakistan also received some rain in August. It is likely that breeding conditions will further improve during the forecast period.
- 14. Light rains fell in a few places in the red locust outbreak countries but, major precipitation was not reported in August in the region

#### **DESERT LOCUST ACTIVITIES**

15. Western and Northwestern Africa Outbreak Region: Scattered adult desert locusts, *Schistocerca gregaria* (Forskal) were seen in August in the western and northwestern outbreak region. Small-scale breeding was reported in southern Mauritania, northern Mali and Northern Niger. Small-scale breeding might have also occurred in

northeastern Chad and southern Algeria where favorable conditions persisted. Other countries in the region remained fairly calm in August.

16. Forecast: It is likely that locust populations will slightly increase in those areas where favorable conditions persisted and adult locusts were seen, but other outbreak areas in the western and northwestern region will remain fairly calm during the forecast period. Considering the vastness and remoteness of the breeding and outbreak areas, it is recommended that regular surveys and monitoring activities are carried out to mitigate any unpredicted locust upsurges

# 17. Eastern Africa, Northeastern Africa, and the Near East Outbreak Region:

As a result of the favorable conditions that persisted throughout July and August, small-scale breeding was seen in Northern Darfur and a similar situation might have occurred in Northern Kordofan, Sudan. Apart from a mixture of a few scattered desert locusts and the African migratory locusts that persisted in agricultural areas in southern Egypt, no locusts were reported from the other countries in the region.

- 18. Forecast: Given the favorable conditions that persisted in July and August in these areas and the floods that occurred in Kassala region and elsewhere in the country, it is likely that the locust numbers will be on the rise in Sudan during the forecast period. Some locust activities could also be seen in parts of the summer breeding areas in Yemen where the numbers could slightly increase. Other countries in the region will likely remain fairly calm during the forecast period.
- 19. **Eastern Outbreak Region:** A few isolated adult locusts persisted in the summer

breeding areas in Pakistan and perhaps Rajasthan, India.

20. Forecast: It is likely that small-scale breeding might have started in both countries as a result of the good rains that fell in July and August, but the locust numbers will not change significantly during the forecast period.

## OTHER LOCUST AND GRASSHOPPER ACTIVITIES

21. Dense populations of the Senegalese grasshopper, Oedaleus senegalenses(Krauss) were seen in a number of areas in southern Senegal in late July into August. Sizeable locust numbers were observed in the northern and North-eastern parts of the country as far as Kaffrine and Linguere. Similar populations were seen in South-central and South-eastern parts of the country and at times extending into Guinea Bissau where this pest has been confused with Schistocerca. Adults OES from the 1st generation have already moved north and began producing the 2nd generation of nymphs. The Senegal DPV is planning to use a biopesticide, Green Muscle, to control the pest. Several adult variegated grasshopper, Zonocerus variegatus, were seen copulating and laying eggs in their outbreak areas in Sokone, Tamba, Ziguinchor, and Kolda. Excessive floods in several parts of the country greatly reduced populations of younger hopper bands. Most of the grasshopper outbreaks that were reported in the western lowlands of Eritrea in July were controlled, but details were not available on the species and extent of infestation at the time this report was compiled. No reports were received on the tree locust, Anacridium melanorhodon (Walker), or brown locust, Locustana pardalina (Walker).

22. The locust outbreak in Afghanistan was on a lower scale this year compared to last year. Only 120,000 ha were reported infested in Baghlan, Samangan, Balkh and Kunduz. This was partly attributed to better planning and early intervention as well as coordination of external assistance. No reports were received on the Italian locust *Calliptamus italicus* (L), Moroccan locust, *Dociostaurus maroccanus* or the migratory locusts in Uzbekistan and Kazakhstan in August.

Note: Given the existing infrastructure and other wanting conditions in the country, it is expected that it will take a few years before the Afghan national crop protection department will be able to conduct regular surveillance and monitoring activities or organize and launch control operations against locusts without external support.

- 23. Forecast: It is likely that locust numbers may generally decline in the invasion areas and limited locust activities will be seen during the forecast period. Active survey, monitoring, and early interventions using the most appropriate and safe methods available will be essential to avert any significant crop loss.
- 24 Latin America and the Caribbean (LAC). No reports were received on locusts or grasshoppers in LAC countries in August.
- 25. Forecast. Some ETOP activities may take place here and there in the coming month or so, but due to lack of sufficient information, a substantive forecast has not been possible.
- 26. **Red locust,** *N. septemfasciata* (Surville): No monthly update was received from our partners on red locusts at the time this report was compiled. It is likely that control operations that were planned in July in Iku-

Katavi and Wembere outbreak areas, Tanzania have reduced locust numbers. The scanty precipitation and lack of locust activities might have also contributed to the low locust numbers in the other outbreak areas in the region in August.

- 27. **Forecast:** There is a low probability that a small-scale breeding could occur during the forecast period in areas that may have received some precipitation. Routine survey and monitoring are recommended to avoid any unpredicted invasions.
- 28. Madagascar migratory locust, *L. migratoria capito* (L.). No reports were received on the Madagascar migratory locust in August. It is likely that ecological conditions may slightly improve with the onset of the rains in these regions and small-scale locust activities could begin appearing in the outbreak areas during the forecast period.
- 29. **Brown locust,** *L. pardalina* (Walker): The brown locust situation continued to be calm throughout August in the traditional outbreak areas in the Karoo regions in Namibia and South Africa. It is likely that it will remain that way during the forecast period unless the rain starts falling.

#### **ARMYWORM ACTIVITIES**

30. Armyworm, *S. exempta* (Walker). It was indicated that most of the armyworm infestations that were reported from the highland and western lowland areas of Eritrea were controlled by the end of July and further infestations were not reported in August. Armyworm infestations were controlled on sorghum fields in Dire Dawa Administrative region, Ethiopia. No further reports were received in August from the other DLCO-EA or IRLCO-CSA member-countries.

31. Forecast: Armyworm activities will likely decline during the forecast period. Very limited activities may be seen in a few isolated localities, but significant activities are not likely. Regular survey and monitoring are recommended.

#### **QUELEA BIRD ACTIVITIES**

- 32. **Red-billed quelea**, *Q. quelea* (L). Quelea birds continued being a problem in Tanzania, Kenya and Ethiopia where they were seen attacking cereal crops. Control operations were carried out using DLCO-EA spray aircraft in Oromiya region, Ethiopia and Moshi region, Tanzania. A private aircraft was hired by the farmers to spray the birds in Meru District, Kenya. No reports were received in August from other DLCO-EA or IRLCO-CSA member-countries
- 33. Forecast: It is likely that quelea birds could continue posing a threat to cereal crops in a few localities in Tanzania, Kenya and Ethiopia during the forecast period. Regular monitoring and survey are essential to avert any serious damage.

#### RECOMMENDATIONS

34. During the reporting month, a few of the ETOP outbreaks, mainly quelea birds, armyworm, and grasshoppers required control actions on a limited scale. If left unaddressed, such infestations could crease and cause serious damage to crops and pasture. It is evident that a minimum shift of balance in the already sensitive production system of the subsistence farming mode could significantly offset the already precarious food security situation in most of the countries that live under a constant threat from ETOP outbreak. Therefore, it is important that regular monitoring, surveillance and reporting are

maintained and communicated promptly to the appropriate bodies within the national, regional and international structures and timely control operations are implemented when and as required.

Note: The end of the drought and/or dry spell in the major ETOP outbreak regions could trigger serious pest invasions and, perhaps, lead to subsequent crop loss. Hence, regular survey, monitoring, and reporting are highly recommended to avert any such invasions.

### ACTION REQUESTED AND CONTACT INFORMATION

35. The Assistance for Emergency Locust/Grasshopper Abatement, formerly known as the Africa Emergency Locust/ Grasshopper Assistance (AELGA) project, is managed by USAID, Bureau for Democracy, Conflict and Humanitarian Assistance (DCHA), U.S. Office for Foreign Disaster Assistance (OFDA). AELGA closely works and/or interacts with the UN/Food and Agriculture Organization, other international organizations, USAID bilateral and regional missions, DLCO-EA, IRLOC-CSA, host country ministries, and research establishments, and Southern Africa **Development Community Drought Monitoring** Center (SADC/DMC). Information on ETOPs is regularly collected from these and other sources, including the Information Core for Southern Africa Migratory Pests (ICOSAMP), to continuously monitor and analyze the potential risks of large-scale emergency outbreaks, and compile and disseminates it to interested parties worldwide as a SITREP. Unsolicited reports or information about ETOP situations and activities in your region or country are always warmly welcome and much appreciated.

36. Missions with programs and portfolios on food security, agriculture, environment, conflict and related activities are solicited to encourage their host country counterparts to send us updates on ETOP activities as often as possible. FEWS field personnel are also solicited to send us any information they may secure on ETOP activities in their countries and/or regions of responsibility. Regional organizations with mandates for ETOPS and host country partners are kindly requested to forward their reports by the last day of the reporting month or within the first three days of the forecasting months. Please, forward reports, information, questions, and/or requests to Dr. Yene T. Belayneh: ybelayneh@ofda.net FAX: 202-347-0315 (USA).

#### **USEFUL LINKS**

For more information on the weather conditions, you may visit the following web sites:

 $\frac{\text{http://www.fao.org/WAICENT/faoinfo/econo}}{\text{mic/giews/economic/engslish/esahel/sehtoc.ht}}$   $\underline{m}$ 

#### http://www.fews.net

For more information on ETOP activities, you may visit:

 $\underline{http://www.fao.org/news/global/locusts/locuho} \\ \underline{m.htm/}$ 

http://www.english/newsroom/news/2002/500 0-en.htm/

http://www.web.agr.ac.uk/directory/NRI/pcs/

http://www-web.gre.ac.uk/directory/NRI/quel/

http://icosamp.ecoport.org/

# TO LEARN MORE ABOUT AELGA'S ACTIVITIES, VISIT US AT OUR WEB SITE: WWW.AELGA.NET

### 37. UPCOMING EVENT

Interregional Trainer Training Course on Alternative Application Strategies and Tactics (AAST) for acridid control. **Those interested** can contact Dr. Yene T. Belayneh, at ybelayneh@ofda.net or phone: 202-661-9374 and FAX: 202-347-0315 (USA)

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